

4.0673

PROCEEDINGS  
OF THE  
BIOLOGICAL SOCIETY OF WASHINGTON

A NEW SUBSPECIES OF HARVEST MOUSE  
(*REITHRODONTOMYS*) FROM CENTRAL AMERICA

BY EMMET T. HOOPER  
*University of Michigan Museum of Zoology*

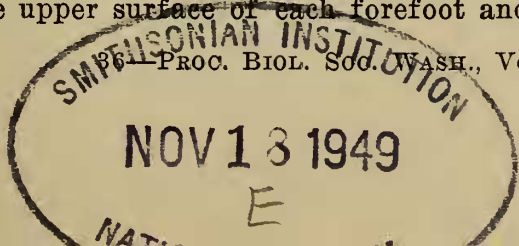
The excellent series of specimens of harvest mice obtained in El Salvador by R. A. Stirton and associates at the University of California makes possible clear appraisal of variation in the species *Reithrodontomys mexicanus* in that part of Central America. To judge from those specimens, several populations of *R. mexicanus* in El Salvador differ from one another in external and cranial features. Each is partly or completely isolated by inhospitable terrain. As now sampled, however, none alone appears to be sufficiently unique to warrant recognition by name, for reasons that will be given in a detailed treatment of the genus now in preparation. Instead, by reason of morphological features common to all, in contrast to those of other populations of *R. mexicanus*, they may be considered conveniently as comprising one geographic race, which may be known as

***Reithrodontomys mexicanus orinus*, new subspecies**

*Type*.—Adult male, skin and skull, No. 98459, Univ. Calif. Mus. Vert. Zool.; El Salvador, Dept. Sonsonate, about 12 miles southeast of Sonsonate, near summit of Balsam Range, Hacienda Chilata, elevation 2,000 feet; collected 12 May 1942 by M. Hildebrand; original No. 1465.

*Distribution*.—Mountain slopes of El Salvador and of southeastern Guatemala. Known range from San Rafael and Lago de Amatitlan, Guatemala, southeast in the coastal chain of volcanoes to the Balsam Range, El Salvador, and southeast on the southern flanks of the interior highlands of El Salvador as far as Cerro Cacaguatique. Vertical range from 2,000 feet at Hacienda Chilata to 6,400 feet on Los Esesmiles, El Salvador.

*Characters and Comparisons*.—Upper parts Ochraceous-Tawny or Tawny (Ridgway, Color Standards and Color Nomenclature, 1912), the tawny bands of the underfur but slightly obscured by the black bands of the comparatively few guard hairs. Underparts white or creamy white, the hairs Dark Plumbeous basally, except on throat where they are white throughout. A blackish eye ring. Ears Cinnamon-Drab to Fuscous. A longitudinal, Fuscous stripe of varying width and length on the upper surface of each forefoot and hind foot, the remainder of the



NOV 16 1949

upper surface white. Tail Fuscous, and monochrome or slightly paler ventrally. Skull of moderate size (for the species) with shallow brain case, long rostrum and incisive foramina, small molar teeth, and small auditory bullae.

*R. m. orinus* resembles *R. m. lucifrons* in body size, and both races are characterized by bright tawny coloration, which in full adult pelage compares favorably with that of *Peromyscus nuttalli aureolus*. The upper parts of the race *orinus*, however, average paler and the underparts are usually white, rather than Light Pinkish Cinnamon as in *lucifrons*. Cranially, *orinus* differs from *lucifrons* as follows: shallower brain case; relatively<sup>1</sup> longer rostrum (averages 91 per cent of brain case depth in *orinus* and 87 per cent in *lucifrons*); shorter palate; longer incisive foramina (average 50 per cent of brain case depth, compared with 47 per cent in *lucifrons*); and smaller auditory bullae.

From *howelli*, *orinus* differs in larger size, paler upper parts (the orange bands similar in hue but the black bands more abundant), relatively broader zygomatic, narrower and longer rostrum, longer palate, and smaller auditory bullae.

Compared with *orinus*, *ocotepequensis* is smaller and much darker dorsally; it has a shorter tail and smaller skull, with relatively smaller brain case, narrower zygomatic and larger auditory bullae.

*Measurements*.—Averages and extremes, in millimeters, of six adult topotypes: total length, 181 (175-187); tail vertebrae, 108 (100-126); hind foot, 19 (18-21). Greatest length of skull, 23.1 (22.6-23.4); zygomatic breadth, 12.0 (11.5-12.6); breadth of brain case, 11.0 (10.7-11.4); depth of brain case, 8.6 (8.2-8.9); interorbital breadth, 3.6 (3.4-3.7); breadth of rostrum, 4.2 (3.9-4.3); length of rostrum (from notch, near lacrimal, on anterior inner border of zygomatic arch anteriorly to tip of nasal), 8.3 (8.0-8.8); length of hard palate, 3.4 (3.2-3.5); length of incisive foramen, 4.3 (4.1-4.6); alveolar length of molar row, 3.2 (3.2-3.3); least transverse breadth of zygomatic plate, 1.6 (1.4-1.7); breadth of mesopterygoid fossa, 1.5 (1.4-1.8)

*Remarks*.—*R. m. orinus* lives in comparatively arid parts of El Salvador and southeastern Guatemala. The diagnostic characters of the race apparently are best developed in southwestern El Salvador, as indicated by specimens from Hacienda Chilata and Volcán de Santa Ana. Those from Chilata are the palest and have the most distinctive crania: relatively broad zygomatic; shallow, posteriorly depressed brain case; long rostrum and incisive foramina; slight molar teeth, and small auditory bullae. The examples from Volcán de Santa Ana have larger molars and average slightly darker dorsally, but are otherwise similar. Away from those two localities, to the north (Los Esesmites), east (Cerro Cacaguatique) and northwest (San Rafael and Lago de Amatitlan), the pelage color averages slightly darker, the cranium deeper, and the rostrum shorter.

*Specimens examined*.—A total of 50 from the following localities:

EL SALVADOR: Dept. Chalatenango: Los Esesmites, 6,400 ft., 12. Depts. Morazan and San Miguel: Cerro Cacaguatique, 3,500-4,800 ft., 22. Dept. Sonsonate: Hacienda Chilata, 2,000-2,600 ft., 7; Volcán de Santa Ana, 4,500-5,000 ft., 4.

<sup>1</sup>In these comparisons the term "relatively" implies: with respect to depth of brain case.

GUATEMALA: Dept. Guatemala: Lago de Amatitlan, 4,200 ft., 4;  
San Rafael, 5,000 ft., 1.

(The above-listed specimens are from collections as follows: all from El Salvador, Museum of Vertebrate Zoology, University of California; from Amatitlan, Fish and Wildlife Service Collections of the U. S. National Museum; from San Rafael, Chicago Natural History Museum.)

